

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter of	)	
	)	MM Docket No. 00-10 ✓
Establishment of a Class A	)	MM Docket No. 99-292
Television Service	)	RM-9260

To: The Commission

**REPLY COMMENTS OF HIC BROADCAST, INC.**

HIC Broadcast, Inc. ("HIC"), licensee of Television Station KFWD(TV), Fort Worth, Texas, by its attorneys, hereby submits its reply comments on the FCC's *Notice of Proposed Rule Making* concerning the establishment of a Class A television service<sup>1</sup> and implementation of the Community Broadcasters Protection Act of 1999 ("CBPA").<sup>2</sup>

**I. Class A Stations Should Protect All NTSC Facilities.**

KFWD, licensed to operate on Channel 52 in Fort Worth, Texas, is the only Hispanic-owned and one of only two Spanish-language full power television stations in the Dallas/Ft. Worth market. On October 29, 1999, the FCC granted HIC authority to construct KFWD's digital television ("DTV") facilities on DTV Channel 51 at the Cedar Hill antenna farm in Dallas. Following the grant of the permit, on December 16, 1999, KFWD filed an application with the FCC to relocate its analog facilities to the Cedar Hill antenna farm as well. In that application, HIC showed that relocation of the station's NTSC facilities would have substantial

<sup>1</sup> *Establishment of a Class A Television Service, Order and Notice of Proposed Rule Making*, MM Docket Nos. 00-10, 99-292, FCC 00-16 (rel. Jan. 13, 2000) (the "Notice").

<sup>2</sup> Section 5008 of Pub. L. No. 106-113, 113 Stat. 1501 (1999), Appendix I, codified at 47 U.S.C. § 336(f).

No. of Copies rec'd 078  
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public interest benefits, allowing KFWD to improve its analog coverage, bring Spanish-language programming to an increased number of viewers in the Dallas market, and achieve substantial operational efficiencies associated with the collocation of its DTV and analog facilities. (A copy of KFWD's application is included in Exhibit A hereto.) Under the Commission's proposed interpretation of the CBPA, however, the relocation of KFWD's transmitter site could be precluded by low power television stations that are granted a Class A license. HIC therefore joins other commenters in urging the Commission to interpret the CBPA provisions expansively to ensure that this potential threat does not become a reality.

In its *Notice*, the Commission requested comment on Section (f)(7)(A) of the CBPA which requires Class A stations to protect NTSC stations.<sup>3</sup> The Commission tentatively concluded that Class A stations would be required to protect NTSC facilities that were licensed as of November 29, 1999 and NTSC facilities authorized by construction permits granted as of November 29, 1999. All other NTSC facilities, including those proposed in modification applications filed after November 29, 1999, would not receive such protection. Thus, under this interpretation, the facilities proposed in KFWD's December 16 modification application would not be protected from Class A operations.

Davis Television, among other commenters, encouraged the Commission to interpret this section of the CBPA broadly as encompassing all full power NTSC licenses, construction permits and applications, regardless of the status of their operations on November 29, 1999. Davis argued that for the Commission to interpret the statute otherwise would undermine the entire analog television allotment scheme and longstanding Commission precedent requiring that

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<sup>3</sup> *Notice* at ¶ 27.

low power television stations protect full power stations.<sup>4</sup> HIC agrees. Surely, Congress could not have intended to place additional limitations on a NTSC station's future ability to modify its facilities and enhance service to the public, particularly as such stations like KFWD transition to DTV service and find it necessary to collocate their NTSC and DTV facilities.

## **II. Class A Television Applications Should be Subject to Petitions to Deny.**

The Commission also has requested comment whether Class A license applications should be subject to a thirty-day petition to deny period. HIC joins the Association of America's Public Television Stations ("APTS"), the Society of Broadcast Engineers ("SBE"), and other commenters in urging the Commission to afford interested parties a formal 30-day period in which to file a petition to deny a Class A application.<sup>5</sup>

First, a petition to deny period would ensure that full power stations have adequate notice and time to evaluate Class A applications and to determine whether impermissible interference would occur. The FCC only recently released the list of low power television stations that had filed certifications of eligibility for Class A status. HIC is still reviewing this list but has identified several applicants whose proposed status as a Class A television station could be mutually exclusive with KFWD's transmitter site relocation. A petition to deny period, however, will allow HIC and other full power stations the time necessary to evaluate fully these stations' operations and determine the potential impact on both their DTV and analog facilities.

Second, such a period would permit interested parties to scrutinize applicants' evidence of compliance with the eligibility requirements and ensure that ineligible LPTV stations do not gain Class A protection. Under the CBPA, the Commission must grant a Class A license to a

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<sup>4</sup> See Comments of Davis Television, et.al. at 3-9.

<sup>5</sup> APTS Comments at 15-16; SBE Comments at 5.

“*qualifying* low-power television station” within 30 days of receipt of the application.<sup>6</sup> If issues are raised in a petition to deny period that cast reasonable doubt about the qualifications of a Class A applicant, however, the Commission is not obliged to grant a license within the thirty day period. Indeed, the Commission has no authority whatsoever to grant licenses to ineligible applicants. Accordingly, the Commission should subject applications for Class A licenses to petitions to deny within the parameters of the CBPA.

### **III. Conclusion.**

HIC respectfully urges the Commission to adopt an expansive interpretation of the provisions of the CBPA requiring Class A television stations to protect full power analog stations. As Davis Television has noted, it is simply counterintuitive that Congress intended anything but to ensure that all NTSC stations, regardless of their operating status on November 29, 1999, would be protected from Class A television operations. It also is critical that the Commission subject all Class A television applications to a thirty-day petition to deny period. Given the substantial number of Class A eligibility certifications that have been filed, and full


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<sup>6</sup> 47 U.S.C. § 336(f)(1)(C) (*emphasis added*).

power stations' interest in protecting both their analog and DTV facilities, there should be an established period of time in which interested parties may oppose a Class A license application.

Respectfully submitted,

HIC BROADCAST, INC.

By:   
Elizabeth A. McGeary

DOW, LOHNES & ALBERTSON, PLLC  
1200 New Hampshire Avenue, N.W.  
Suite 800  
Washington, D.C. 20036

Its Attorneys

February 22, 2000

## **EXHIBIT A**

### **Application to Modify KFWD Analog Facilities**

FCC/MELLON

DEC 16 1999

**DOW, LOHNES & ALBERTSON, PLLC**  
ATTORNEYS AT LAW

WASHINGTON, D.C.

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FACSIMILE 770-901-8874

December 16, 1999

Federal Communications Commission  
Mass Media Services  
P.O. Box 358165  
Pittsburgh, Pennsylvania 15251-5165

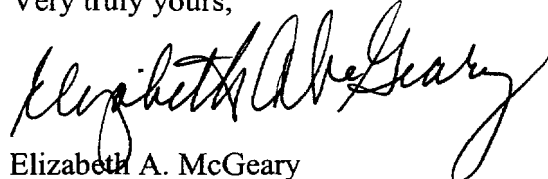
Re: Television Station KFWD(TV)  
Ft. Worth, Texas  
Facility ID No. 29015  
Application to Modify Analog Facilities

Dear Sir or Madam:

On behalf of HIC Broadcast, Inc., licensee of Television Station KFWD(TV), Ft. Worth, Texas, we transmit herewith in triplicate an application for a minor change in the station's licensed facilities. A check in the amount of \$725.00, accompanied by FCC Form 159, is enclosed to cover the filing fee.

Should any questions arise concerning this application, kindly contact the undersigned.

Very truly yours,

  
Elizabeth A. McGeary

EAM/sfh  
Enclosure

READ INSTRUCTIONS CAREFULLY  
BEFORE PROCEEDING

FEDERAL COMMUNICATIONS COMMISSION

APPROVED BY OMB 3060-0589

REMITTANCE ADVICE

SPECIAL USE

FCC USE ONLY

(1) LOCKBOX # 358165

PAGE NO. 1 OF 1

SECTION A - PAYER INFORMATION

(2) PAYER NAME (if paying by credit card, enter name exactly as it appears on your card)

HIC Broadcasting, Inc.

(3) TOTAL AMOUNT PAID (dollars and cents)

\$ 725.00

(4) STREET ADDRESS LINE NO. 1

3000 W. Story Road

(5) STREET ADDRESS LINE NO. 2

(6) CITY

Irving

(7) STATE

TX

(8) ZIP CODE

75038

(9) DAYTIME TELEPHONE NUMBER (include area code)

(972) 255-5200

(10) COUNTRY CODE (if not in U.S.A.)

IF PAYER NAME AND THE APPLICANT NAME ARE DIFFERENT, COMPLETE SECTION B  
IF MORE THAN ONE APPLICANT, USE CONTINUATION SHEETS (FORM 159-C)

SECTION B - APPLICANT INFORMATION

(11) APPLICANT NAME (if paying by credit card, enter name exactly as it appears on your card)

KEWD(TV)

(12) STREET ADDRESS LINE NO. 1

3000 W. Story Road

(13) STREET ADDRESS LINE NO. 2

(14) CITY

Irving

(15) STATE

TX

(16) ZIP CODE

75038

(17) DAYTIME TELEPHONE NUMBER (include area code)

(972) 255-5200

(18) COUNTRY CODE (if not in U.S.A.)

COMPLETE SECTION C FOR EACH SERVICE, IF MORE BOXES ARE NEEDED, USE CONTINUATION SHEETS (FORM 159-C)

SECTION C - PAYMENT INFORMATION

(19A) FCC CALL SIGN/OTHER ID

KEWD(TV)

(20A) PAYMENT TYPE CODE (PTC)

M

P

T

(21A) QUANTITY

1

(22A) FEE DUE FOR (PTC) IN BLOCK 20A

\$

725.00

FCC USE ONLY

(23A) FCC CODE 1

(24A) FCC CODE 2

(19B) FCC CALL SIGN/OTHER ID

(20B) PAYMENT TYPE CODE (PTC)

(21B) QUANTITY

(22B) FEE DUE FOR (PTC) IN BLOCK 20B

\$

FCC USE ONLY

(23B) FCC CODE 1

(24B) FCC CODE 2

(19C) FCC CALL SIGN/OTHER ID

(20C) PAYMENT TYPE CODE (PTC)

(21C) QUANTITY

(22C) FEE DUE FOR (PTC) IN BLOCK 20C

\$

FCC USE ONLY

(23C) FCC CODE 1

(24C) FCC CODE 2

(19D) FCC CALL SIGN/OTHER ID

(20D) PAYMENT TYPE CODE (PTC)

(21D) QUANTITY

(22D) FEE DUE FOR (PTC) IN BLOCK 20D

\$

FCC USE ONLY

(23D) FCC CODE 1

(24D) FCC CODE 2

SECTION D - TAXPAYER INFORMATION (REQUIRED)

(25)

PAYER TIN

0 9 5 4 1 3 5 2 0 3

(26) COMPLETE THIS BLOCK ONLY IF APPLICANT NAME IN B-11 IS DIFFERENT FROM PAYER NAME IN A-2

APPLICANT TIN

0 9 5 4 1 3 5 2 0 3

SECTION E - CERTIFICATION

(27) CERTIFICATION STATEMENT

I, Elizabeth A. McGeary

(PRINT NAME)

, Certify under penalty of perjury that the foregoing and supporting information  
are true and correct to the best of my knowledge, information and belief. SIGNATURE *Elizabeth A. McGeary*

SECTION F - CREDIT CARD PAYMENT INFORMATION

(28)

MASTERCARD/VISA ACCOUNT NUMBER:

EXPIRATION DATE:

MASTERCARD

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

0 0 0 0

MONTH YEAR

VISA

I hereby authorize the FCC to charge my VISA or MASTERCARD  
for the service(s)/authorization(s) herein described.

AUTHORIZED SIGNATURE

DATE



2824

REFERENCE NO.	DESCRIPTION	INVOICE DATE	INVOICE AMOUNT	DISCOUNT TAKEN	AMOUNT PAID
	Application Fee for Waiver of Analog License				725.00

CHECK DATE	CHECK NO.	PAYEE	DISCOUNTS TAKEN	CHECK AMOUNT
12/14/99	2824	Federal Communications Comm.		\$725.00



## HIC BROADCASTING, INC.

**KFWD-TV 52**  
3000 W. STORY RD.  
IRVING, TX 75038

**BANK ONE, TEXAS, N.A.**  
32-61/1110

2824

**Memo: Application Fee**

2824

Dec 14, 1999

\*\*\*\*\*\$725.00

**CHECK NO.**

DATE \_\_\_\_\_

**AMOUNT**

PAY  
TO THE  
ORDER  
OF:

**Seven Hundred Twenty-Five and 0/100 Dollars**

Federal Communications Comm.  
Washington, DC 20554

Wagner H. Brown  
John J. Thompson  
AUTHORIZED SIGNATURE

00 28 24 11 11 10006 14: 156 336 399 11

**SECURITY FEATURES INCLUDED. DETAILS ON BACK.**

FOR  
FCC  
USE  
ONLY

## FCC 301

### APPLICATION FOR CONSTRUCTION PERMIT FOR COMMERCIAL BROADCAST STATION

FOR COMMISSION USE ONLY  
FILE NO.

#### Section I - General Information

1. Legal Name of the Applicant HIC Broadcast, Inc.		
Mailing Address 3000 W. Story Road		
City Irving	State or Country (if foreign address) TX	ZIP Code 75038
Telephone Number (include area code) (972) 255-5200		E-Mail Address (if available)
	Call Sign KFWD (TV)	Facility ID Number 29015

2. Contact Representative (if other than applicant) Elizabeth A. McGeary	Firm or Company Name Dow, Lohnes & Albertson, PLLC
Telephone Number (include area code) (202) 776-2672	E-Mail Address (if available) emcgeary@dlalaw.com

3. If this application has been submitted without a fee, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114):

☐ Governmental Entity ☐ Other \_\_\_\_\_

#### 4. Application Purpose.

- |   |  |
|---|--|
| <input type="checkbox"/> New station                                  | <input type="checkbox"/> Major Modification of construction permit |
| <input type="checkbox"/> Major Change in licensed facility            | <input type="checkbox"/> Minor Modification of construction permit |
| <input checked="" type="checkbox"/> Minor Change in licensed facility | <input type="checkbox"/> Major Amendment to pending application    |
|   | <input type="checkbox"/> Minor Amendment to pending application    |

a. File number of original construction permit: \_\_\_\_\_ ☒ N/A

b. Service Type: ☐ AM ☐ FM ☒ TV ☐ DTV

c. Community of License: 

City Ft. Worth	State TX
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d. Facility Type: ☒ Main ☐ Auxiliary

If an amendment, submit as an Exhibit a listing by Section and Question Number of the portions of the pending application that are being revised.

Exhibit No.

**NOTE:** In addition to the information called for in this section, an explanatory exhibit providing full particulars must be submitted for each question for which a "No" response is provided.

**Section II - Legal**

1. **Certification.** Applicant certifies that it has answered each question in this application ☒ Yes ☐ No based on its review of the application instructions and worksheets. Applicant further certifies that where it has made an affirmative certification below, this certification constitutes its representation that the application satisfies each of the pertinent standards and criteria set forth in the application instructions and worksheets.

2. **Parties to the Application.**

- a. List the applicant, and, if other than a natural person, its officers, directors, stockholders with attributable interests, non-insulated partners and/or members. If a corporation or partnership holds an attributable interest in the applicant, list separately its officers, directors, stockholders with attributable interests, non-insulated partners and/or members. Create a separate row for each individual or entity. Attach additional pages if necessary.

(1) Name and address of the applicant and, if applicable, its officers, directors, stockholders, or partners (if other than individual also show name, address and citizenship of natural person authorized to vote the stock). List the applicant first, officers next, then directors and, thereafter, remaining stockholders and partners.

(2) Citizenship.

(3) Positional Interest: Officer, director, general partner, limited partner, LLC member, etc.

(4) Percentage of votes.

(5) Percentage of equity.

(1)	(2)	(3)	(4)	(5)

- b. Applicant certifies that equity interests not set forth above are non-attributable.

☐ Yes ☐ No

☐ N/A

See Explanation  
in Exhibit No.

3. **Other Authorizations.** List call signs, locations, and facility identifiers of all other broadcast stations in which applicant or any party to the application has an attributable interest.

Exhibit No.

☐ N/A

4. **Multiple Ownership.**

- a. Applicant certifies that the proposed facility:

☐ Yes ☐ No

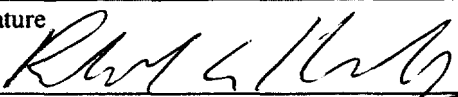
See Explanation  
in Exhibit No.

1. complies with the Commission's multiple and cross-ownership rules;
2. does not present an issue under the Commission's cross-interest policy;
3. does not present an issue under the Commission's policies relating to media interests of immediate family members;
4. complies with the Commission's policies relating to future ownership interests; and
5. complies with the Commission's restrictions relating to the insulation and non-participation of non-party investors and creditors.

## Section II - Legal

- b Radio Applicants Only. If the grant of the application would result in certain principal community service contour overlaps, see Local Radio Ownership Worksheet, Question 1, applicant certifies that all relevant information has been placed in public inspection file(s) and submitted to the Commission. ☐ Yes ☐ No ☐ N/A See Explanation in Exhibit No.
5. **Character Issues.** Applicant certifies that neither applicant nor any party to the application has or has had any interest in, or connection with: ☐ Yes ☐ No See Explanation in Exhibit No.
- a. any broadcast application in any proceeding where character issues were left unresolved or were resolved adversely against the applicant or party to the application; or
- b. any pending broadcast application in which character issues have been raised.
6. **Adverse Findings.** Applicant certifies that, with respect to the applicant and any party to the application, no adverse finding has been made, nor has an adverse final action been taken by any court or administrative body in a civil or criminal proceeding brought under the provisions of any law related to the following: any felony; mass media-related antitrust or unfair competition; fraudulent statements to another governmental unit; or discrimination. ☐ Yes ☐ No See Explanation in Exhibit No.
7. **Alien Ownership and Control.** Applicant certifies that it complies with the provisions of Section 310 of the Communications Act of 1934, as amended, relating to interests of aliens and foreign governments. ☐ Yes ☐ No See Explanation in Exhibit No.
8. **Program Service Certification.** Applicant certifies that it is cognizant of and will comply with its obligations as a Commission licensee to present a program service responsive to the issues of public concern facing the station's community of license and service area. ☐ Yes ☐ No
9. **Local Public Notice.** Applicant certifies that it has or will comply with the public notice requirements of 47 C.F.R. Section 73.3580. ☐ Yes ☐ No
10. **Auction Authorization.** If the application is being submitted to obtain a construction permit for which the applicant was the winning bidder in an auction, then the applicant certifies, pursuant to 47 C.F.R. Section 73.5005(a), that it has attached an exhibit containing the information required by 47 C.F.R. Sections 1.2107(d), 1.2110(i), 1.2112(a) and 1.2112(b), if applicable. ☐ Yes ☐ No ☐ N/A
- Exhibit No.
- An exhibit is required unless this question is inapplicable.
11. **Anti-Drug Abuse Act Certification.** Applicant certifies that neither applicant nor any party to the application is subject to denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. Section 862. ☒ Yes ☐ No

I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in good faith. I acknowledge that all certifications and attached Exhibits are considered material representations. I hereby waive any claim to the use of any particular frequency as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and request an authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended.)

Typed or Printed Name of Person Signing Roland A. Hernandez	Typed or Printed Title of Person Signing President
Signature 	Date 12-14-99

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT  
(U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT  
(U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).

## EXHIBIT A

### Request for Waiver of 47 C.F.R. § 73.698, Table II

By this application, HIC Broadcast, Inc. ("HIC"), licensee of Television Station KFWD(TV), Ft. Worth, Texas, requests a waiver of the  $\pm 3$  channel taboo set forth in Section 73.698, Table II, of the Commission's Rules so that KFWD(TV) may relocate its analog transmitter site facilities from their current location in Ft. Worth to the Cedar Hill antenna farm in Dallas. Cedar Hill is the established television antenna farm in the Dallas/Ft. Worth market, and KFWD has already received authorization to locate its digital television facilities at this site. KFWD is the only Hispanic-owned and one of only two Spanish-language full power television stations in the Dallas/Ft. Worth market. Relocation of the station's analog facilities would allow KFWD to serve a greater number of Hispanic viewers and to compete more effectively with the other full power television stations in the Dallas/Ft. Worth market. Grant of the waiver also would be consistent with the Commission's recent decision in *KRCA License Corp.*, FCC 99-388 (rel. Dec. 14, 1999). Given this precedent as well as the substantial public interest benefits that would be achieved, waiver of the  $\pm 3$  channel taboo is warranted.

#### ***Background.***

KFWD is a Hispanic-owned station that has been under primarily the same ownership since it began operation in 1988 as the Dallas/Ft. Worth market's first Telemundo Network affiliate. The station has continued to air Telemundo Network and locally-produced Spanish-language programming since that date.

The station's analog transmitter site is located in Ft. Worth, Texas. From this site, KFWD provides Grade B coverage to approximately 3,842,782 persons over an area of 15,692 sq. kilometers. On October 29, 1999, the FCC granted HIC a construction permit to construct KFWD's digital television facilities on DTV Channel 51 at the Cedar Hill transmitter site (FCC File No. BPCDT-19990331KO). To improve KFWD's analog coverage and to achieve substantial operational efficiencies and economic benefits, HIC is now requesting authority to relocate the station's analog facilities to the same site.

#### ***The $\pm 3$ Channel Taboo.***

Section 73.698, Table II, of the Commission's Rules provides in pertinent part that UHF television stations operating within three channels of each other may not locate their transmitter sites less than 31.4 kilometers (19.5 miles) apart.<sup>1</sup> KFWD's proposed move to the Cedar Hill antenna farm requires a waiver of the rule because, operating on Channel 52 from Cedar Hill, KFWD would be located 0.4 kilometers from the licensed transmitter site of Television Station

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<sup>1</sup> 47 C.F.R. § 73.698, Table II (1999).

KSTR-TV, Channel 49, and 5.1 kilometers from the proposed transmitter site of KSTR-TV. See FCC File No. BPCT-991019AT.

Because the basis for the  $\pm 3$  channel taboo is simple intermodulation, the channels that will be most susceptible to interference as a result of the KFWD/KSTR short-spacing are Channel 46 (three channels below Channel 49) and Channel 55 (three channels above Channel 52). See Engineering Statement of Hammett & Edison, included with the instant application (the "Engineering Statement"). The closest NTSC station operating on Channel 46 is KNCT at Belton, Texas, more than 188 kilometers from the Cedar Hill site; thus no interference will be caused to this station.<sup>2</sup> The closest NTSC station operating on Channel 55 is KLDT at Lake Dallas, Texas, which is 46.2 kilometers from KFWD's proposed Cedar Hill facilities.<sup>3</sup> Given this distance, there is a potential for interference to KLDT's operations. However, as demonstrated herein, and in the OET-69 interference study included in the Engineering Statement, no such interference will occur and KLDT will remain unaffected by any short-spacing between KSTR and KFWD.

***Request for Waiver.***

The FCC has waived Section 73.698's spacing restrictions in the past when "an applicant can demonstrate that the public interest will be better served by waiver in the circumstances presented than by following the terms of the rule."<sup>4</sup> Among the factors the Commission considers in making this public interest analysis include the likelihood of interference to the stations affected by the short-spacing, any gains or losses in service resulting from the proposed site relocation, and the availability of other fully-spaced or less short-spaced transmitter sites from which the station could achieve the same coverage.<sup>5</sup>

In *KRCA License Corp.*, the Commission considered a request for waiver of its television short-spacing rules similar to that presented by the instant application. There, three independent television stations in the Los Angeles market requested waivers of Sections 73.610 and 73.698 of the FCC's rules to relocate their analog television facilities to the main antenna farm in Los Angeles. The Commission granted the waivers, finding that any detriment to waiving the rule would be outweighed by substantial public interest benefits, including (a) the short duration of the waiver, (b) the facilitation of construction of the applicants' digital television facilities, (c)

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<sup>2</sup> Engineering Statement at 1.

<sup>3</sup> *Id.*

<sup>4</sup> *KRCA License Corp.*, FCC 99-388, ¶ 5. See *Delta Rio Broadcasting Co.*, 50 FCC 2d 596 (1974).

<sup>5</sup> *KRCA License Corp.*, FCC 99-388, ¶ 5.

the minimal likelihood of any interference to other stations, and (d) the marginal loss of service compared to the service gains that would result from the site relocations.<sup>6</sup>

In the instant case, grant of a waiver clearly would serve the public interest and would be wholly consistent with the Commission's ruling in *KRCA License Corp.* Allowing KFWD to relocate its facilities will greatly facilitate the construction of the station's DTV facilities. The enclosed OET-69 interference study demonstrates that KFWD's proposed operations would not cause any interference to KLDT, KSTR-TV, or any other station. Moreover, there will be no loss of existing service; instead, the relocation of KFWD's facilities will result in substantial service gains, allowing the station to reach a greater number of Hispanic viewers in the Dallas/Ft. Worth area.

Short-Term Duration of Waiver.

The nature of the waiver requested will be short-term in nature given that KFWD ultimately will return its analog license to the FCC. KFWD's DTV construction permit has already been granted and did not require any waiver of the DTV interference protection restrictions. Accordingly, the short-spacing will not be replicated in the station's DTV operations. The short duration of the waiver, thus, weighs in favor of a grant.

Facilitation of DTV Construction.

Permitting KFWD to relocate its analog facilities to the Cedar Hill antenna farm would allow KFWD to collocate its analog and DTV facilities, thereby achieving significant cost savings in the areas of technical operations, equipment maintenance, engineering staff, and site fees. These cost savings in turn will allow KFWD to construct its DTV facilities more quickly and to progress with greater speed to full implementation of DTV.<sup>7</sup> This substantial public interest benefit plainly warrants waiver of the  $\pm 3$  channel taboo.<sup>8</sup>

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<sup>6</sup> *Id.*

<sup>7</sup> The Commission has recognized that collocation of a station's digital and analog facilities has important public interest benefits, including reducing DTV construction costs and facilitating a smoother conversion to full DTV service. *Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service, Fifth Report and Order*, 12 FCC Rcd 12809, 12847 (1997); *J.S. Kelly, L.L.C.*, 13 FCC Rcd 23632, 23636 (1998).

<sup>8</sup> *KRCA License Corp.*, FCC 99-388, ¶ 18.

Lack of Interference.

As shown in the Engineering Statement, there will be no interference to KLDL's or any other station's operations as a result of KFWD's move to Cedar Hill. The OET-69 interference study included with the Engineering Statement demonstrates that "zero interference to KLDL is predicted" and that there will not be any interference to any other station. Inasmuch as the  $\pm 3$  channel restriction is designed to protect against intermodulation interference, and no such interference is predicted in this case, there is no rational basis for applying the rule to KFWD.<sup>9</sup>

Substantial Service Gains Resulting in Expanded Distribution of Spanish-Language Programming.

Operating from its current analog transmitter site, KFWD provides Grade B coverage to approximately 3,842,782 people in the Dallas/Ft. Worth DMA. If the FCC permits KFWD to relocate its analog facilities to the Cedar Hill antenna farm, the station's Grade B population coverage will increase by 5.9% percent, with the station reaching approximately 4,070,681 persons. There will be no loss of Grade B service, as indicated by the map contained in Exhibit E-2E of the Engineering Statement.

At least twenty percent of the population in the Dallas/Ft. Worth area is Hispanic. However, with its current facilities, KFWD does not reach all of the heavily-populated Hispanic areas in the market. Moreover, given the distance of its current transmitter site from Dallas, KFWD is unable to provide live news coverage of areas in Dallas that have a significant Hispanic population. If KFWD is permitted to move its facilities to the Cedar Hill antenna farm, it will be in a much better position to provide increased live local coverage of these Hispanic neighborhoods and to reach additional Hispanic viewers. Moreover, the station will continue to provide full coverage to Ft. Worth and surrounding areas, and indeed, will increase its coverage to those areas west of Ft. Worth.

The substantial service gains that will be achieved here provide a compelling basis for grant of a waiver. Unlike *KRCA License Corp.*, there will be no loss of Grade B service to KFWD's existing viewers. With the pure gain of an additional 227,899 viewers, significant benefits will be realized by allowing KFWD to relocate to Cedar Hill. *Compare KRCA License Corp.*, FCC 99-388 (waiver granted despite Grade B service losses). KFWD is the only Hispanic-owned full power television station in the Dallas/Ft. Worth market. It has provided locally-produced and network Spanish-language programming for over 10 years. HIC believes that in order to remain competitive and to continue offering this invaluable service to the public,

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<sup>9</sup> See *id.* ¶ 20 ("we find significant the fact that neither the KRCA or KSCI relocations is likely to cause interference to other television station"); *Delta Rio Broadcasting, Inc.*, 50 FCC 2d at 597 ("the Commission concludes that there is little possibility of undesired intermodulation interference").



KFWD must be allowed to increase its coverage and reach a larger portion of the market's households. This is best accomplished by the FCC's waiver of its short-spacing rules and granting KFWD authority to move to the Cedar Hill antenna farm.

Site Availability.

Similar to the applicants in *KRCA License Corp.*, HIC cannot show that its current site is no longer suitable or that there are no other available fully-spaced or less short-spaced sites available for its proposed use. However, given the unique and significant public interest benefits of the proposed move, this factor should not be dispositive.<sup>10</sup>

Public Interest and Economic Benefits.

Relocation of KFWD's analog facilities to the Cedar Hill transmitter site, where its DTV facilities also will be located, will have a number of additional public interest and economic benefits. Substantial cost savings, coupled with its increased coverage of the market, will allow KFWD to compete more effectively with other stations in the market. The majority of the other television broadcasters in the Dallas/Ft. Worth area operate their analog facilities from the Cedar Hill antenna farm.<sup>11</sup> With a combined analog/DTV facility at the same site, KFWD will be able to compete with these broadcasters on a more even footing.

In addition to the location of its existing transmitter site, KFWD is at a disadvantage when compared to other broadcasters in the market because it does not have the economic resources that many large-market television stations do. HIC is a small, family-owned company. Roland Hernandez, his brother, Enrique Hernandez, Jr., and their parents own HIC, and KFWD is their only television station in the United States.<sup>12</sup> Of Hispanic origin, the Hernandez family is the only minority full power television station licensee in the Dallas/Ft. Worth market. The Commission has long recognized the difficulties faced by minority broadcasters and the importance of increasing opportunities for minority broadcasters.<sup>13</sup> Allowing HIC to increase

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<sup>10</sup> *KRCA License Corp.*, FCC 99-388, ¶ 17.

<sup>11</sup> Grant of a waiver also would be consistent with the Commission's general policies supporting the use of antenna farms by broadcasters in a particular market. *See Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service, Sixth Report and Order*, 12 FCC Rcd 14588, 14634-35 (1997).

<sup>12</sup> Roland Hernandez is the Chairman and CEO of Telemundo Holdings, Inc., and by virtue of that position, also has an attributable ownership interest in an additional ten television stations. Mr. Hernandez, however, holds no equity interest in Telemundo Holdings, Inc., serving only in an employment capacity.

<sup>13</sup> *See, e.g., Review of the Commission's Regulations Governing Television Broadcasting; Television Satellite Stations Review of Policy and Rules, Report and Order*, 1999 FCC Lexis

*continued...*

KFWD's analog coverage and thereby serve more Hispanic viewers and compete more effectively in the Dallas/Ft. Worth market is precisely the type of measure the Commission should be taking to fulfill its promise to enhance opportunities for minority broadcasters.

The economic benefits of the proposed move cannot be ignored because they impact directly on the public interest. HIC's intention is to remain in the Dallas/Ft. Worth market long-term notwithstanding the extraordinary amount of consolidation going on in the broadcast industry. To continue the family business, however, HIC must be afforded the opportunity to improve KFWD's service and to compete more effectively with other stations in the market. The economic efficiencies and the increased coverage of the Dallas/Ft. Worth market that will be accomplished by relocation to Cedar Hill will provide the Hernandez family with that critical opportunity. In turn, the Hispanic community in the Dallas/Ft. Worth market will benefit from the Hernandez family's continued ownership of the station and the Spanish-language news and information program service it provides.

#### ***Conclusion.***

Waiver of Section 73.698's spacing requirements would manifestly serve the public interest. The waiver will be short-term and will provide HIC, the only Hispanic-owned, full power television station broadcaster in the Dallas/Ft. Worth market, the opportunity to achieve substantial economic efficiencies. In turn, HIC will be able to operate its analog and digital facilities from the same site and implement its DTV operations more quickly.

Significantly, the short-spacing between KFWD and KSTR-TV will not result in any interference to KLDT or any other station; thus the interference concerns underlying the  $\pm 3$  channel taboo are not impacted. There also will be no loss of Grade B service. Instead, relocation of KFWD's facilities to Cedar Hill will allow the station to increase its coverage by 5.9%. Taken together with the economic benefits, the increase in coverage will place KFWD on a more even competitive footing with other stations in the market and in a better position to provide Spanish-language news and information programming to a greater number of the market's Hispanic viewers.

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*...continued*

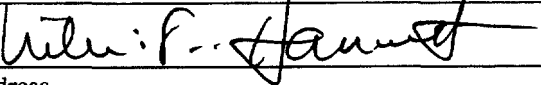
3817, at \*17-\*19 (FCC Aug. 6, 1999)(discussing Commission's policy of promoting minority ownership and participation in broadcasting); *Implementation of Section 309(j) of the Communications Act - Competitive Bidding for Commercial Broadcast and Instructional Television Fixed Service Licenses, Notice of Proposed Rulemaking*, 12 FCC Rcd 22363, 22398 (1997) (discussing Commission's "longstanding commitment to encouraging minority participation in the broadcast industry"); *Policies and Rules Regarding Minority and Female Ownership of Mass Media Facilities, Notice of Proposed Rulemaking*, 10 FCC Rcd 2788, 2788 (1995) (initiating rulemaking to encourage minority ownership and thereby maximize diversity of viewpoints).

**Television Station KFWD(TV)**  
**Ft. Worth, Texas**  
**FCC Form 301**  
**December 1999**

Based upon the foregoing and the FCC's recent decision in *KRCA License Corp.*, HIC respectfully requests that the Commission waive the  $\pm 3$  channel spacing restriction contained in Section 73.698 of the Commission's rules.

### SECTION III PREPARER'S CERTIFICATION

I certify that I have prepared Section III (Engineering Data) on behalf of the applicant, and that after such preparation, I have examined and found it to be accurate and true to the best of my knowledge and belief.

Name William F. Hammett, P.E.		Relationship to Applicant (e.g., Consulting Engineer) Consulting Engineer	
Signature 		Date December 14, 1999	
Mailing Address Hammett & Edison, Inc., Consulting Engineers      Box 280068			
City San Francisco		State or Country (if foreign address) California	ZIP Code 94128
Telephone Number (include area code) 707/996-5200		E-Mail Address (if available) bhammett@h-e.com	

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT  
(U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT  
(U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).

### SECTION III-C TV Engineering

#### TECHNICAL SPECIFICATIONS

Ensure that the specifications below are accurate. Contradicting data found elsewhere in this application will be disregarded. All items must be completed. The response "on file" is not acceptable.

#### TECH BOX

1. Channel Number: 52
2. Offset: Plus \_\_\_\_\_ Minus \_\_\_\_\_ Zero ☒
3. Zone: ☐ I ☒ II ☐ III
4. Antenna Location Coordinates: (NAD 27)
- 32 ° 35 ' 19 " ☒ N ☐ S Latitude  
96 ° 58 ' 05 " ☐ E ☒ W Longitude
5. Antenna Structure Registration Number: 1045531
- ☐ Not applicable ☐ FAA Notification Filed with FAA
6. Height of Radiation Center Above Mean Sea Level: 739 meters
7. Overall Tower Height Above Ground Level: 502 meters
8. Height of Radiation Center Above Ground Level: 494 meters
9. Height of Radiation Center Above Average Terrain: 545 meters
10. Maximum Effective Radiated Power (ERP): 5,010 kW
11. Antenna Specifications:
- |    |                            |                               |
|----|----------------------------|-------------------------------|
| a. | Manufacturer <u>Andrew</u> | Model <u>ATW25HS5HTC2-51S</u> |
|----|----------------------------|-------------------------------|
- b. Electrical Beam Tilt: 0.75 degrees ☐ Not Applicable
- c. Mechanical Beam Tilt: 0.75 degrees toward azimuth 190 degrees True ☐ Not Applicable
- Attach as an Exhibit all data specified in 47 C.F.R. Section 73.685.
- Exhibit No. E-1
- d. Polarization: ☒ Horizontal ☐ Circular ☐ Elliptical

# TECH BOX

e. Directional Antenna Relative Field Values: ☐ Not applicable (Nondirectional)

Rotation: \_\_\_\_\_ ° ☒ No rotation

Degree	Value	Degree	Value	Degree	Value	Degree	Value	Degree	Value	Degree	Value
0	0.898	60	1.000	120	0.468	180	0.135	240	0.222	300	0.927
10	0.893	70	0.974	130	0.334	190	0.144	250	0.334	310	0.974
20	0.898	80	0.927	140	0.222	200	0.135	260	0.468	320	1.000
30	0.917	90	0.834	150	0.132	210	0.124	270	0.596	330	0.987
40	0.953	100	0.726	160	0.095	220	0.095	280	0.726	340	0.953
50	0.987	110	0.596	170	0.111	230	0.132	290	0.834	350	0.917
Additional Azimuths											

If a directional antenna is proposed, the requirements of 47 C.F.R. Sections 73.682(a)(14) and 73.685 must be satisfied. **Exhibit required.**

Exhibit No.  
E-1

**NOTE:** In addition to the information called for in this section, an explanatory exhibit providing full particulars must be submitted for each question for which a "No" response is provided.

## CERTIFICATION

12. **Allotment.** The proposed facility complies with 47 C.F.R. Section 73.607.

☒ Yes ☐ No

See Explanation  
in Exhibit No.

13. **Power and Antenna Height.** The proposed facility complies with 47 C.F.R. Section 73.614.

☒ Yes ☐ No

See Explanation  
in Exhibit No.

14. **Community Coverage.** The proposed facility complies with 47 C.F.R. Sections 73.685(a) and (b).

☒ Yes ☐ No

See Explanation  
in Exhibit No.

15. **Main Studio Location.** The proposed main studio location complies with 47 C.F.R. Section 73.1125.

☒ Yes ☐ No

See Explanation  
in Exhibit No.

16. **Separation Requirements.** The proposed facility complies with the separation requirements 47 C.F.R. Section 73.610. ☐ Yes ☒ No 

See Explanation in Exhibit No. E-2
--
17. **Objectionable Interference.** The applicant accepts full responsibility in accordance with 47 C.F.R. Sections 73.685(d) and (g) for the elimination of any objectionable interference (including that caused by intermodulation) to facilities in existence or authorized prior to the grant of this application. ☒ Yes ☐ No 

See Explanation in Exhibit No.
-----------------------------------
18. **Environmental Protection Act.** The proposed facility is excluded from environmental processing under 47 C.F.R. Section 1.1306 (*i.e.*, the facility will not have a significant environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments). ☒ Yes ☐ No 

See Explanation in Exhibit No.
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Exhibit No. E-3
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If "Yes," **submit as an Exhibit** a brief explanation of why an Environmental Assessment is not required. Also describe therein the steps that will be taken to limit RF radiation exposure to the public and to persons authorized access to the tower site.

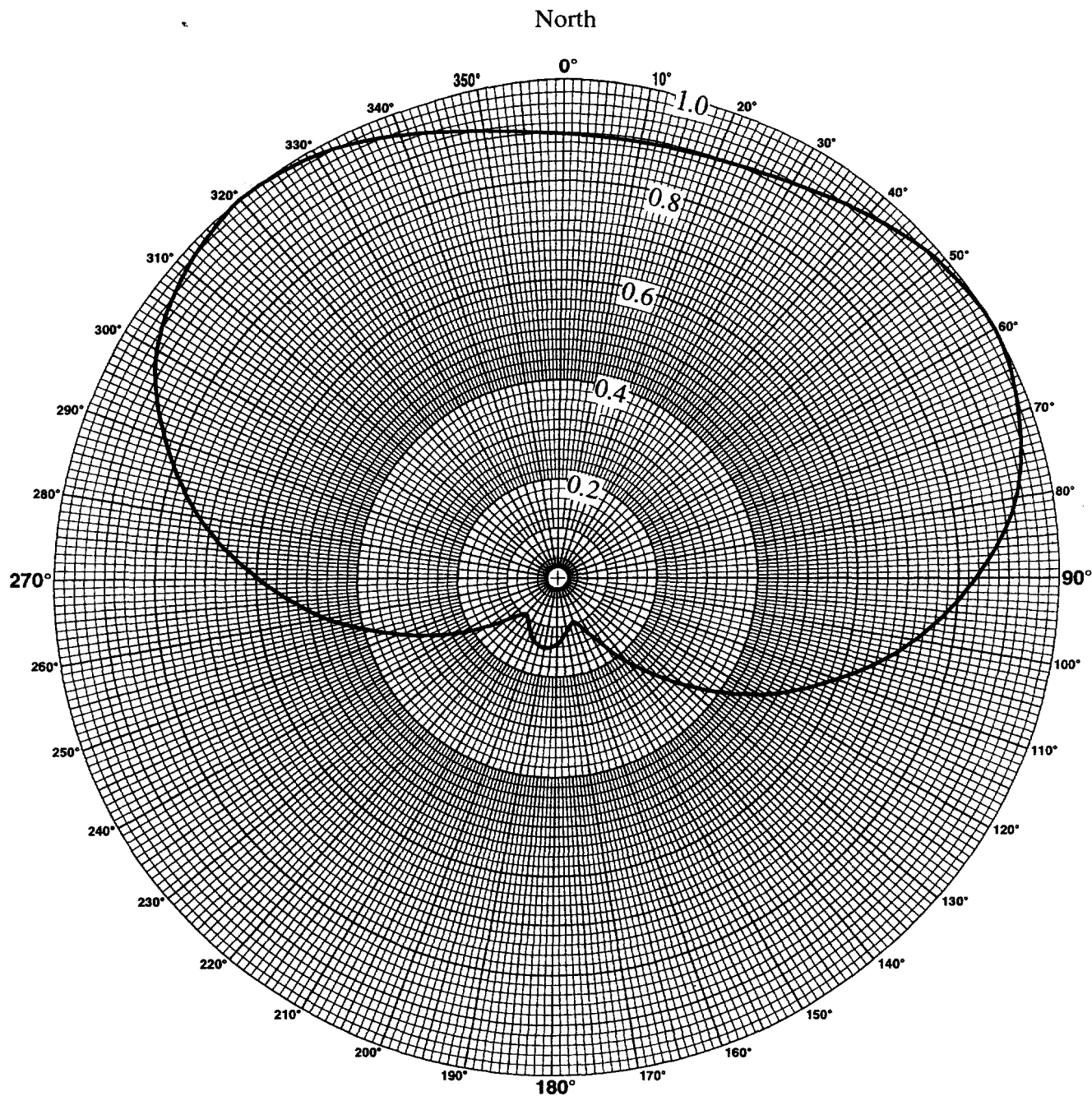
By checking "Yes" above, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic exposure in excess of FCC guidelines.

If "No," submit as an Exhibit an Environmental Assessment required by 47 C.F.R. Section 1.1311.

**PREPARER'S CERTIFICATION IN SECTION III MUST BE COMPLETED AND SIGNED.**

TV Station KFWD • NTSC Channel 52 • Fort Worth, Texas

Proposed Horizontal Plane Pattern



Based on manufacturer's supplied data.

For tabulation, see FCC Form 301 §III-C Tech Box Question 11.e.

Although the FCC Rules request submission of the horizontal plane patterns in dBk, it has been Commission policy not to require this duplicative information, and it is not included here. These patterns can, of course, be provided upon request.



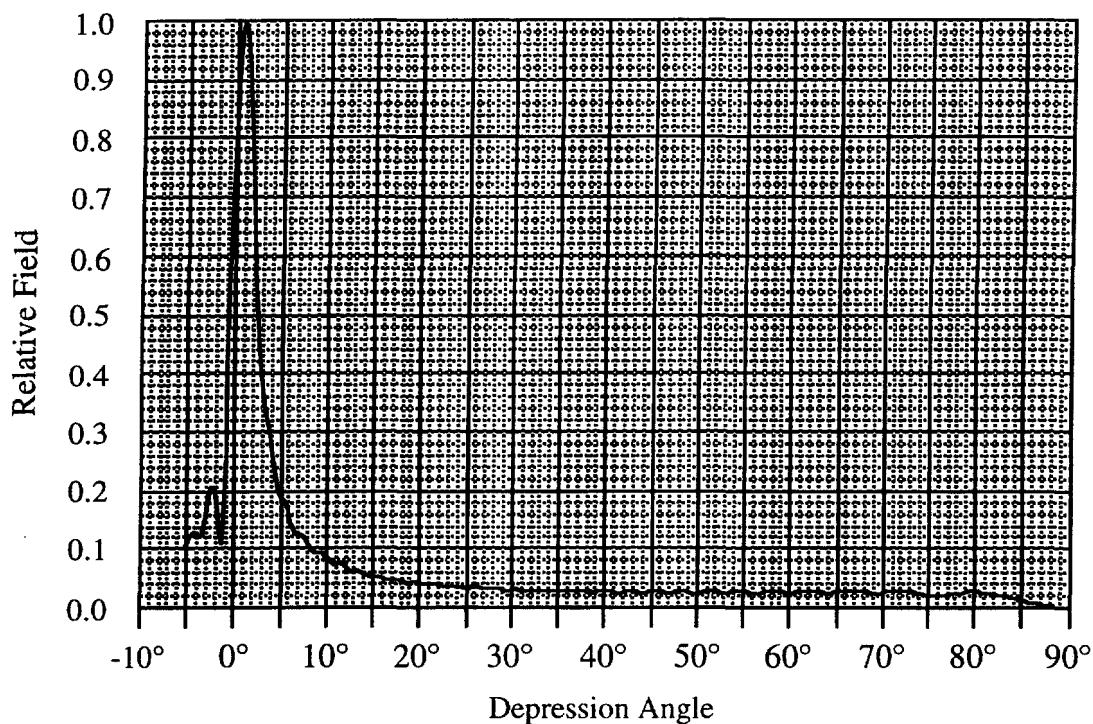
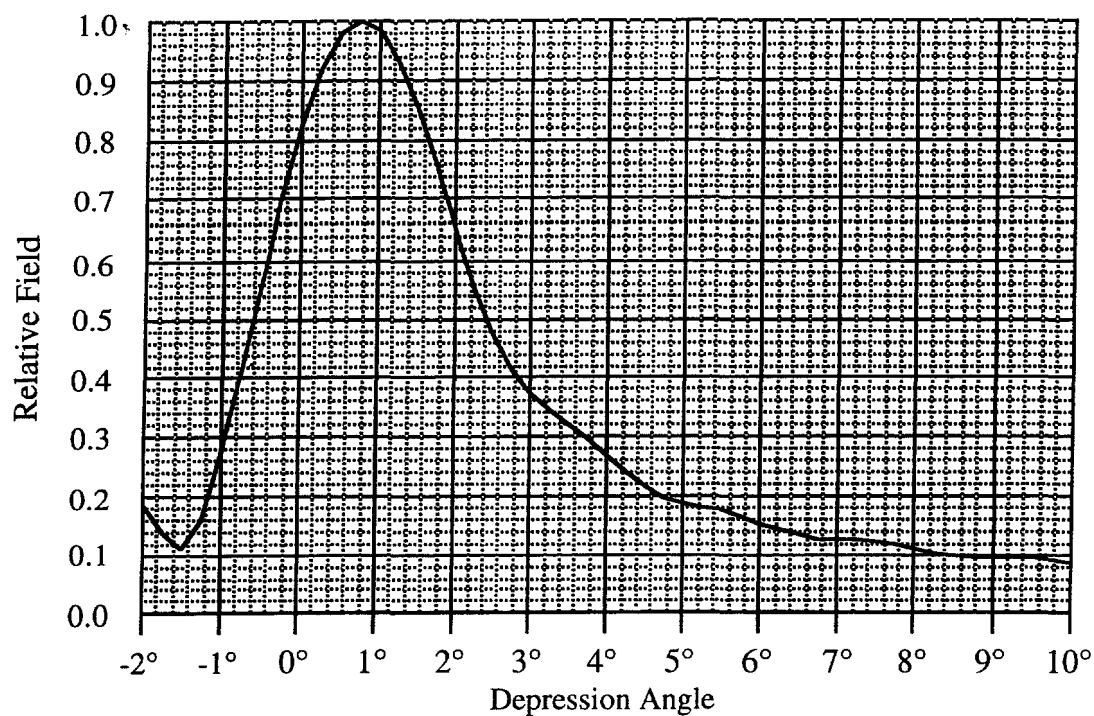
**HAMMETT & EDISON, INC.**  
CONSULTING ENGINEERS  
SAN FRANCISCO

991112  
Exhibit E-1A



TV Station KFWD • NTSC Channel 52 • Fort Worth, Texas

Proposed Elevation Plane Pattern



Although the FCC Rules request submission of the elevation plane patterns in dBk, it has been Commission policy not to require this duplicative information, and it is not included here. These patterns can, of course, be provided upon request.



**HAMMETT & EDISON, INC.**  
CONSULTING ENGINEERS  
SAN FRANCISCO

991112  
Exhibit E-1B

## TV Station KFWD • NTSC Channel 52 • Fort Worth, Texas

### Waiver Request: $\pm 3$ -Channel Taboo

The proposed KFWD site is 0.4 kilometers from the licensed facilities of Station KSTR-TV, NTSC Channel 49, Irving, Texas, (FCC File No. BLCT-910614KG) and is 5.1 kilometers from a new location requested by KSTR-TV (FCC File No. BPCT-991019AT), in either case less than the 31.4 kilometers specified by Section 73.698, Table II, of the FCC Rules. For the technical reasons below, no interference is expected and so waiver of that section of the Rules is respectfully requested.

The basis of the  $\pm 3$ -channel UHF taboo is simple intermodulation, meaning that the interference threat is to Channel 46 (*i.e.*, three channels below Channel 49) and to Channel 55 (*i.e.*, three channels above Channel 52).

- The closest NTSC Channel 46 station is KNCT, at Belton, Texas, more than 188 kilometers distant. At this distance, it is clear that there is no third-order intermodulation threat from a combination of the KSTR-TV N49 and KFWD N52 signals.
- The closed NTSC Channel 55 station is KLDT, at Lake Dallas, 46.2 kilometers from the proposed KFWD site and only 38.9 kilometers from the licensed KFWD facilities. In Table 5B to OET Bulletin Number 69 ("OET-69"), a desired-to-undesired ("D/U") ratio of -33 dB is given for analog-into-analog protection for the N-3 relationship, that is, interference to KNCT N55 would only be predicted to occur if the KFWD N52 or the KSTR-TV N49 signals exceeded the KLDT signal strength by more than 33 dB. As shown by the attached OET-69 interference studies in Exhibit E-2B (based on the proposed horizontal plane pattern and the OET-69 generic elevation pattern for UHF NTSC stations) and Exhibit E-2C (based on the actual main-beam azimuth pattern and the actual elevation pattern, with its  $0.75^\circ$  of electrical beam tilt and  $0.75^\circ$  of mechanical down tilt), zero interference to KLDT is predicted.

In addition, the KFWD Grade B contour from its existing site would, as shown in Exhibit E-2D be entirely compassed by the Grade B contour from the proposed site, ensuring that there would be no loss in existing service. In fact, the Grade B population would increase by 5.9%, from 3,842,782 to 4,070,681 persons, while the land area within the Grade B contour would increase by 70.5%, from 15,692 to 26,757 square kilometers.

Thus, it would be in the public interest to grant a waiver of Section 73.698 of the FCC Rules, because such action 1) would allow KFWD to locate to an established antenna farm area, 2) would allow KFWD to collocate at its granted DTV site (File No. BPCDT-19990331KO, granted October 29, 1999), 3) would not cause predicted interference to KLDT (or to any other NTSC or DTV station), 4) would preserve existing Grade B service, and 5) would provide Grade B service to more persons over a larger area.



# TV Station KFWD • NTSC Channel 52 • Fort Worth, Texas

## OET-69 Interference Study (Based on Horizontal Plane Pattern)

Interference analysis  
tvixstudy 2.3.2

Before case parameters:  
(same as "Original" below)

After case parameters:

	--Modified-----	--Original-----
Station:	N52 KFWD LIC	N52 KFWD LIC
City:	FORT WORTH, TX	FORT WORTH, TX
Coordinates:	N 32-35-19.0	N 32-45-01.0
	W 96-58-05.0	W 97-16-07.0
Height AMSL:	739.0 m	512.0 m
Maximum ERP:	5010 kW	5000 kW
Azimuth pattern:	N52.atCH.HPLANEaz.pat	BOG-ODD890209KG
Orientation:	0.0	0.0
Elevation pattern:	OET-69 generic	OET-69 generic
Service level:	65.1 dBu	65.1 dBu

Protected station		BasePop 1000s	Before		After		%Chng
			IX Change 1000s	%Base	IX Change 1000s	%Base	
N49 KSTRTV LIC	IRVING, TX	3,905	7	0.2	7	0.2	0.0
N49 KSTRTV APP	IRVING, TX	4,035	0	0.0	0	0.0	0.0
D51 KFWD-DT APP	FORT WORTH, TX	3,809	-168	-4.4	-168	-4.4	0.0
D51 KFWD-DT allot	FORT WORTH, TX	3,809	0	0.0	9	0.2	0.2
N52 KSBI LIC	OKLAHOMA CITY, OK	993	0	0.0	0	0.0	0.0
N52 KSBI CP	OKLAHOMA CITY, OK	1,137	0	0.0	0	0.0	0.0
N52 850320KG APP	BLANCO, TX	2,182	1	0.0	1	0.0	0.0
N52 850320LC APP	BLANCO, TX	2,248	14	0.6	14	0.6	0.0
N55 KLDT CP	LAKE DALLAS, TX	3,651	0	0.0	0	0.0	0.0
D52 KNWSDT allot	KATY, TX	3,688	0	0.0	0	0.0	0.0
D53 KWTXDT allot	WACO, TX	853	-13	-1.5	-13	-1.5	0.0

# TV Station KFWD • NTSC Channel 52 • Fort Worth, Texas

## OET-69 Interference Study (Based on Actual Patterns)

Interference Analysis  
tvixstudy 2.3.2

Before case parameters:  
(same as "Original" below)

After case parameters:

	--Modified-----	--Original-----
Station:	N52 KFWD LIC	N52 KFWD LIC
City:	FORT WORTH, TX	FORT WORTH, TX
Coordinates:	N 32-35-19.0	N 32-45-01.0
	W 96-58-05.0	W 97-16-07.0
Height AMSL:	739.0 m	512.0 m
Maximum ERP:	5010 kW	5000 kW
Azimuth pattern:	ATW-C2az.pat	BOG-ODD890209KG
Orientation:	10.0	0.0
Elevation pattern:	25HSElv.pat	OET-69 generic
Electrical tilt:	0.75	
Mechanical tilt:	0.75@190.0	
Service level:	65.1 dBu	65.1 dBu

Protected station		BasePop 1000s	Before		After		%Chng
			IX Change 1000s	%Base	IX Change 1000s	%Base	
N49 KSTRTV LIC	IRVING, TX	3,905	7	0.2	7	0.2	0.0
N49 KSTRTV APP	IRVING, TX	4,035	0	0.0	0	0.0	0.0
D51 KFWD-DT APP	FORT WORTH, TX	3,809	-168	-4.4	-168	-4.4	0.0
D51 KFWDDT allot	FORT WORTH, TX	3,809	0	0.0	8	0.2	0.2
N52 KSBI LIC	OKLAHOMA CITY, OK	993	0	0.0	0	0.0	0.0
N52 KSBI CP	OKLAHOMA CITY, OK	1,137	0	0.0	0	0.0	0.0
N52 850320KG APP	BLANCO, TX	2,182	1	0.0	1	0.0	0.0
N52 850320LC APP	BLANCO, TX	2,248	14	0.6	14	0.6	0.0
N55 KLDL CP	LAKE DALLAS, TX	3,651	0	0.0	0	0.0	0.0
D52 KNWSDT allot	KATY, TX	3,688	0	0.0	0	0.0	0.0
D53 KWTXDT allot	WACO, TX	853	-13	-1.5	-13	-1.5	0.0



**HAMMETT & EDISON, INC.**  
CONSULTING ENGINEERS  
SAN FRANCISCO

991112  
Exhibit E-2C

## TVIXSTUDY™ Analysis Methodology

### Implementation of FCC's Interference-Based Allocation Algorithm

On April 21, 1997, the Federal Communications Commission released its Fifth and Sixth Report and Order texts to Mass Media Docket No. 87-268, establishing a final Table of Allotments for the transition from analog NTSC television service to a digital television ("DTV") service. The Commission utilized a complex set of computerized analysis tools to generate the DTV allotment table and added FCC Rules Section 73.623(b)(2), requiring that similar tools be employed to analyze individual DTV station assignments with regard to their potential interference to other DTV stations, DTV allotments, and existing or authorized NTSC facilities. Those tools were described in FCC OET Bulletin No. 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference* ("OET-69"), released on July 2, 1997. Subsequent to OET-69, the Commission released, on February 23, 1998, its Memorandum Opinion and Order on Reconsideration of the Fifth [and Sixth] Report and Order[s], which made a number of changes to the previous allotment table and modified several of the analysis methods to be employed for studying DTV allotments and potential facility modifications. On August 10, 1998, the Commission published a text, *Additional Application Processing Guidelines for Digital Television (DTV)*, which provided important clarifications and enhancements to the specified analysis methods. Hammett & Edison has developed and refined the TVIXSTUDY computer software to perform FCC-style DTV allocation studies as based on OET-69, its subsequent clarifications, and also upon a detailed examination of the FCC allotment program software source code.

For most NTSC or DTV stations to be studied, the FCC analysis model first determines the location of the conventional F(50,50) Grade B contour of the NTSC station, or of the NTSC station associated with an assigned DTV station, using pattern information contained in the FCC engineering database and an assumed antenna elevation pattern. The model assumes that contour as an envelope, outside of which no protection from interference is implied or afforded. The location of the Grade B contour was used to determine the assigned power for the DTV station, once again using conventional methods found in FCC Rules Section 73.699, Figures 9 and 10, determining the power necessary on a radial basis to generate the associated DTV coverage contour (41 dBu for UHF, 36 dBu for high VHF Channels 7-13, and 28 dBu for low VHF Channels 2-6), for an assigned DTV channel. The maximum power determined using this method was assigned as the DTV operating power, provided it was calculated to be above established minimum power levels; otherwise, a minimum power level was assigned. By the same token, facilities with calculated DTV power levels above the established maximum power levels for a given channel were assigned the maximum power level. The use of this method usually creates a directional DTV antenna replication pattern, even for DTV assignments to presently omnidirectional NTSC TV stations. The FCC requires that a DTV facility employ an antenna design that meets the calculated replication envelope parameters, unless, with a few exceptions, zero or *de minimus* new interference to other facilities can be demonstrated.

In addition to the use of the Grade B envelope and an assumed directional transmitting antenna for all DTV facilities, the model assumes the use of directive receiving antennas at each studied location, or "cell." The characteristics of the receiving antennas are different, not only for the low

VHF, high VHF, and UHF frequency bands, but also for NTSC and DTV receiving situations; the FCC model specifies that more directive antennas be employed for analysis of DTV reception.

The FCC analysis technique employs terrain-sensitive calculation methods based on Version 1.2.2 of the ITS Irregular Terrain Model, also known as the Longley-Rice model. For each NTSC or DTV station to be studied, a grid of cells, two kilometers on a side, fills the associated Grade B or noise-limited contour. The program first determines which of the cells is predicted to receive service from the associated station, using Longley-Rice analysis with F(50,50) statistical weighting for NTSC and F(50,90) statistical weighting for DTV stations. Cells determined to have no service are not studied for interference from other stations.\* Once cells having service are determined, the software analyzes potential interference from other NTSC or DTV stations, again using the Longley-Rice propagation algorithm and defined statistical weighting for all potential interfering signals. Each cell is evaluated, as appropriate, using the desired-to-undesired ratios and methods presented in FCC Rules Section 73.622, 73.623, and 74.706 for each channel relationship, and cells determined to have interference are flagged and excluded from further study, resulting in the generation of net interference-free coverage population totals.

The TVIXSTUDY analysis program employs all of the OET-69 analysis features described above, as well as several other more subtle elements prescribed by the FCC. Additionally, the program allows modeling of implementation scenarios that involve changes to effective radiated power, antenna height, antenna pattern, channel number, and/or transmitter location. TVIXSTUDY also can identify cells that fall in major bodies of water, as based on digitized map data, excluding them from the study. The program is primarily intended to study the effects of existing/potential NTSC or DTV facilities on other DTV or NTSC facilities, as based on desired-to-undesired ratio parameters defined in OET-69. A typical TVIXSTUDY analysis summary includes technical parameters of the proposed DTV or NTSC facility, along with its original (pre-modification) technical parameters, if any. Also included is a listing of each protected DTV and/or NTSC facility or allotment with associated interference-free population tabulations and the unique interference population resulting from operation of the proposed facility. TVIXSTUDY is similar to the program TVCOVSTUDY, which instead predicts the interference-limited coverage of a selected facility.

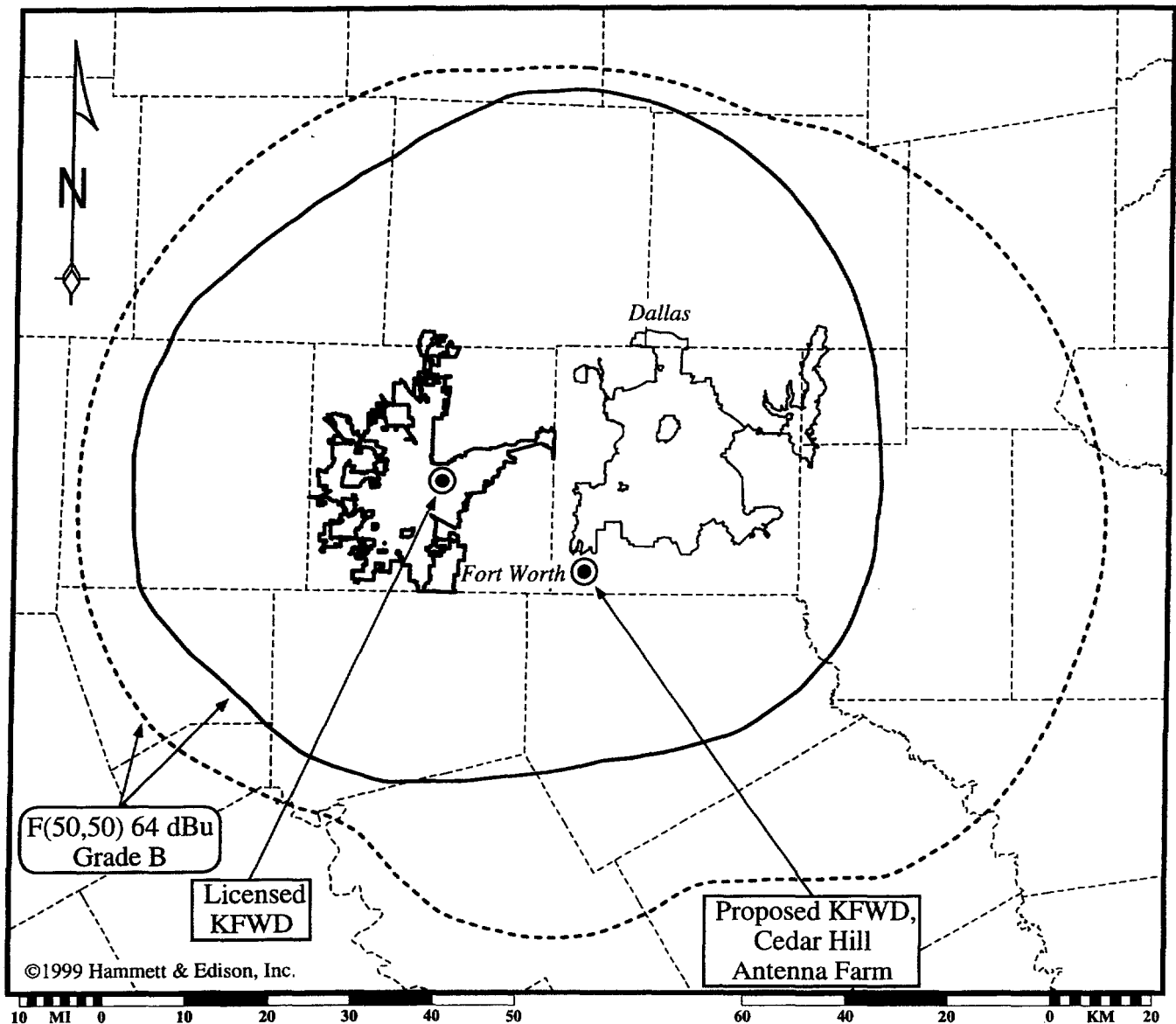
The results of the OET-69 algorithm are dependent on the use of computer databases, including terrain, population, and FCC engineering records. FCC Rules §0.434(e) specifically disclaims the accuracy of its databases, recommending the use of primary data sources (*i.e.*, paper documents), which is not practical for DTV interference analyses. Further, while Hammett & Edison, Inc. endeavors to follow official releases and established precedents on the matter, FCC policy on DTV analysis methods is constantly changing. Thus, the results of OET-69 interference and coverage studies are subject to change and may differ from FCC results.

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\* It is noted that the Longley-Rice model is not always capable of determining, within certain confidence limits, whether a particular cell has service. In such cases, the Longley-Rice algorithm returns an error code; the FCC method for handling such error codes is to assume that the associated cells have interference-free service and, as such, are not further considered. The Hammett & Edison TVIXSTUDY program reports the number of such error cells for a given study and provides the option of generating a map showing their locations, which may be useful for further review using other propagation analysis tools.

TV Station KFWD • NTSC Channel 52 • Fort Worth, Texas

Existing and Proposed Grade B Contours



— = Licensed  
- - - = Proposed

Lambert conformal conic map projection. City limits shown taken from 1995 U.S. Census Bureau TIGER data.

**TV Station KFWD • NTSC Channel 52 • Fort Worth, Texas**

**Waiver Request: 15 dB Antenna Pattern Maximum-to-Minimum**

Because of the use of mechanical beam tilt for the KFWD-DT, Channel 51, antenna, and because this will be a dual-channel, D51/N52 diplexed antenna, the NTSC antenna must have the same 0.75° of mechanical beam tilt proposed for the now authorized KFWD-DT facilities. As a result, in the horizontal plane the maximum-to-minimum ratio of the proposed NTSC pattern would be 20.4 dB, which exceeds the 15 dB limit specified in Section 73.685(e) of the FCC Rules (in the main beam the maximum-to-minimum ratio of the Andrew C2 azimuth pattern is 14.1 dB). A waiver of Section 73.685(e) is respectfully requested. Such a waiver will allow KFWD to minimize the tower structural loading by allowing use of a single transmission line and single antenna, instead of separate transmission lines and separate antennas. Further, many waivers of the 15-dB rule have been granted to other NTSC stations needing to employ mechanical beam tilt designs, and those waivers have been for maximum-to-minimum ratios as high as 28 dB.\*

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\* For example, TV Station KAIL, NTSC Channel 53, at Fresno, California, and TV Station KSTS, NTSC Channel 48, at San Jose, California. Other examples can be provided, if requested.



### Environmental Considerations

An Environmental Assessment is not required, as grant of this application would not be considered a major environmental action.

The proposed transmitting antenna will be side-mounted on an existing self-supporting tower and will not increase the overall height of that existing structure. None of the conditions specified in Section 1.1307(a) of the FCC Rules, concerning actions that may have a significant effect on the environment, are believed to apply.

The proposed transmitting facilities will comply with the FCC guidelines limiting public exposure to radio frequency energy. The maximum power density level at ground level, calculated in accordance with OET Bulletin No. 65 (August 1997), is  $0.00028 \text{ mW/cm}^2$ , or 0.60% of the public exposure guideline applying at UHF Channel 52 (698–704 MHz). Accordingly, the proposed facility is categorically excluded by Section 1.1307(b) of the FCC Rules from having to consider the contributions of other stations at the site.

